

Walsh encoding, and fast algorithms for encoding and decoding of hybrid Walsh codes in sufficient detail that enables one versed in CDMA communications to generate and implement these codes in encoders for CDMA transmission and in decoders in CDMA receivers.

Amended claim 5 modifications are the agreed upon changes you made in your e-mail on 02/12/2007 and address your objections. The limitations "using addresses specified by said reorderings" are clearly defined in the prior "generating said N hybrid Walsh codes  $\tilde{W}(c)$  by re-ordering each of said N Walsh codes into a corresponding real and a corresponding imaginary component of a hybrid Walsh code as defined by equations .....", and the "said Walsh code memory" has been replaced by "a Walsh code memory".

Amended claim 6 modifications are the agreed upon changes you made in your e-mail on 02/12/2007 and address your objections. As it now reads claim 6 clearly describes how the hybrid Walsh code and DFT codes are combined using the Kronecker product to generate a generalized hybrid Walsh code and how these codes are used in the encoder for transmission and in the decoder for receiving the communications.

#### **5. Claim Rejections - 35 USC § 112**

Amended claims 5-9 have been rewritten to attempt to remove narrative and indefinite and functional language and to include steps for implementation of the claims in CDMA communications applications.

Amended claim 8 clearly explains how the encoder in each pass reads a pair of data symbols from a memory, encodes the data symbols with a 2-point hybrid Walsh transform, sums the outputs for each of the two values 0,1 of the encoded chip binary coefficient, writes the two outputs to another memory using the read addresses, and finally outputs the encoded chip vector.


Claim 9 explains the corresponding processing to recover the data symbols from the received encoded chip vector from claim 7

## 6. Conclusions

I believe that the rewritten claims 5-9 now include the essential structural cooperative relationships of elements, provide the antecedent relationships, clearly define the operations utilized and not utilized, provide steps in the construction and implementation such that one versed in CDMA communications can implement the claims in CDMA transmitter encoders and CDMA receiver decoders, and meet the **35 USC 112** standards.

Thanks ever for spending the time and resources to re-write claims 5,6,7 in a language and format suitable for a patent and for explaining how to amend claims 8,9.

Sincerely,



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